

Claims

1. Method for transmitting packet data in a radio telecommunications system comprising a plurality of radio transmitters and radio receivers that use a dynamic multiple access method for separating users at least by means of a time slot separation method, in particular a Time Division Multiple Access (TDMA) method, in addition to methods for secure data transmission, in particular an Automatic Repeat Request (ARQ), with a repeat time slot being used if a renewed transmission of a data packet is required,
characterized in that
 - a) an allocation of frequencies to radio transmitters and radio receivers can be carried out in such a way that each radio transmitter and radio receiver is allocated a unique identifying frequency,
 - b) during the duration of the repeat time slot a frequency-slot separation method can be used in such a way that a data packet to be repeated which is destined for a radio transmitter or radio receiver is transmitted on the frequency identifying said transmitter or receiver,
 - c) a frequency selection can be carried out in each of the radio transmitters and receivers in such a way that the radio transmitters and receivers search for a repeated data packet on their respective identifying frequency.
2. Method in accordance with claim 1, characterized in that step a) is performed once, particularly as part of an initialization of the radio coverage area, with the

allocation being stored at least temporarily in the radio transmitters and radio receivers.

3. Method in accordance with claim 1, characterized in that step a) is carried out at the start of each transmission frame in accordance with the time-slot separation method.
4. Method in accordance with one of claims 1 to 3, characterized in that an allocation of frequencies to radio transmitters and radio receivers is implemented in such a way that each radio transmitter and radio receiver is allocated a sequence with a unique starting value.
5. Method in accordance with one of claims 1 to 3, characterized in that steps b) to c) are implemented if in a radio coverage area of the radio telecommunications system it is determined before the start of a transmission frame that a first number of radio transmitters and radio receivers located in a radio coverage area exceeds a second number in the radio coverage area according to the repeat time slots available with the time-slot separation method.
6. Method in accordance with one of claims 1 to 3, characterized in that steps b) to c) are implemented for each repeat time slot.
7. Method in accordance with one of the preceding claims, characterized in that a repeat takes place due to the absence of an acknowledgement message from a receiving radio transmitter/radio receiver.

8. Method in accordance with one of the claims 1 to 7, characterized in that the allocation of frequencies is implemented in such a way that the radio transmitters and radio receivers calculate it themselves in accordance with an algorithm.
9. Method in accordance with claim 8, characterized in that this calculation takes place on the basis of unique identifying information known to the radio telecommunications system.
10. Method in accordance with one of the preceding claims, characterized in that the radio telecommunications system operates in accordance with the Digital Enhanced Cordless Telecommunication (DECT) or Worldwide Digital Cordless Telecommunications (WDCT) standard.
11. Method in accordance with claim 10, characterized in that an International Portable User Identity (IPUI) is used as identification information in accordance with DECT.